## Case 3085

# *Lacerta undata* A. Smith, 1838 (currently *Pedioplanis undata*; Reptilia, Sauria): proposed conservation of the specific name by the designation of a neotype

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**Abstract.** The purpose of this application is to conserve usage of the name *Pedioplanis undata* (A. Smith, 1838) for the 'western sand lizard' of southern Africa. The recently rediscovered syntypes are specimens of *P. lineoocellata pulchella* Gray, 1845 and not of *P. undata* auct., but acceptance of this typification would result in very considerable confusion. The name *P. undata* would be transferred to *P. l. pulchella* auct., the taxon known as *P. u. undata* would have to have a new name as a subspecies of *P. inornata* Roux, 1907, and there would be other changes of accepted names. It is proposed that these consequences should be avoided by the designation of a neotype for *Lacerta undata* A. Smith, 1838.

**Keywords.** Nomenclature; taxonomy; Reptilia; Sauria; LACERTIDAE; western sand lizard; spotted sand lizard; *Pedioplanis undata*; *Pedioplanis lineoocellata pulchella*; Namibia; South Africa.

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1. The specific name of *Pedioplanis undata* (A. Smith, 1838, p. 93) from the 'northern and western parts of Cape Colony' has been widely and constantly in use for the 'waved *Eremias*' (Gray, 1845, p. 43) or 'western sand lizard' (e.g. Branch, 1988, p. 164). Roux (1907, p. 427) described *Eremias inornata* from the same region. This lizard differs from *P. undata* auct. in colour pattern and was regarded as a 'variety' by Boulenger (1910); Mertens (1971) compared it with the '*olivacea*' form of certain *Podarcis* species. In the course of a revision of the *Pedioplanis undata* complex, Mayer & Berger-Dell'mour (1987) were able to demonstrate that *undata* (auct.) and *inornata* are geographical subspecies, *undata* being the northern one and *inornata* the southern. However, the type locality of *Lacerta undata* cited by Smith (1838) lies some 400 km south of the boundary of the taxon (as subsequently understood) and is within the *inornata* distribution area.

2. Boulenger (1921, pp. 283–289) noted that the descriptions of *Lacerta undata* by Smith (1849) and by Duméril & Bibron (1839) (who had borrowed specimens from Smith), and particularly the drawings accompanying the type description by Smith (1849), did not correspond to *Eremias undata* auct. but to the subspecies

of *E. lineoocellata* Duméril & Bibron, 1839 (p. 314) which was named as *E. l. pulchella* by Gray (1845, p. 42). Boulenger further noted that '*E. undata* is not among the specimens presented by Smith to the British Museum, but the lizard received from Lord Derby, previous to 1845, is probably one of the original types, given away by the former before the publication of his Illustrations'. This last specimen had been briefly described by Gray (1845, p. 42); it is actually a *Pedioplanis undata* (auct.), but was not among the specimens on which Smith's original description of *L. undata* was based (see FitzSimons, 1943, pp. 335–338).

3. A careful comparison of the short original description of *Lacerta undata* and the accompanying drawings with both *P. undata* auct. and *P. lineoocellata pulchella* demonstrates clearly that they refer to *pulchella* and not to *undata* as subsequently understood. The original specimens of *L. undata* were untraced for many decades, but recently one of the authors of this application (W.B.) was able to find the syntypes in the National Museums of Scotland in Edinburgh (W. Böhme & W. Mayer, in preparation); these are specimens of *P. lineoocellata pulchella* Gray, 1845 and not of *P. undata* auct., and this explains the type locality given by Smith (see para. 1 above). Application of the Principles of Priority and of Typification (Article 61 of the Code) would result in *P. lineoocellata pulchella* (Gray, 1845) becoming *P. undata undata* (Smith, 1838); *P. undata inornata* would become *P. inornata inornata*, and *P. lineoocellata lineoocellata* would become *P. undata lineoocellata*. The taxon always called *P. u. undata* would have to be named as a new subspecies of *P. inornata*. These changes would clearly not be in the interest of stability; a well-known form would have to be named anew, and several names, widely used for many decades, would be transferred to other taxa. Moreover, some of the lizards in question (*P. undata* auct. and *P. lineoocellata pulchella*) occur in broad sympatry and even syntopy, so that after an exchange of their names virtually nobody would know which biological entity was meant.

4. In view of the doubt connected with the 'Lord Derby specimen' described by Gray (1845; see para. 2 above), with the erroneous origin of 'S. Africa', and tentatively (but wrongly) regarded as the type of *Lacerta undata* Smith by Boulenger (1921), we think that stability would best be served by designating a neotype for *L. undata* that is consistent with modern usage. We therefore propose that a specimen registered as NMW (Naturhistorisches Museum Wien) 31886 should be designated the neotype. The specimen is an adult male measuring 179 mm in length (snout-vent 52 mm, tail 127 mm, collected at 22° 37′S, 17° 03′E near Windhoek, Namibia, by H. Berger-Dell'mour on 25 October 1987). It has 34 gular scales, 10 collar scales, 12 longitudinal ventral rows, 66 dorsal scale rows at midbody, 28 subdigital lamellae under the fourth toe, 14 femoral pores, and five supralabials; tympanic shield present, lower eyelid with two large transparent scales and three smaller ones below it; there are five dark brown longitudinal bands on the back, the median one being forked on the neck and enclosing a thin, light stripe; flank with pale (yellow in life) spots at the lower margin of the outer lateral dark band.

5. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power to set aside all previous type fixations for the nominal species *Lacerta undata* A. Smith, 1838 and to designate the specimen NMW 31886, for which the data are given in para. 4 above, as the neotype;

(2) to place on the Official List of Specific Names in Zoology the name *undata* A. Smith, 1838, as published in the binomen *Lacerta undata* and as defined by the neotype designated in (1) above.

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